

USCMS Engineer Status Report for September 2003

Bill Tanenbaum

October 7, 2003

1 Work Performed This Month

COBRA/POOL was officially released (COBRA_7_4_0). The schema is stabilized so that DCO4 production running could begin. Fixed several minor bugs in COBRA and POOL.

Participated in review of POOL data service code at CERN, somewhat ineffectively. COMMENT: VRVS is inadequate for full remote participation in discussions. We need Polycom.

Investigated OSCAR crashes. Discovered that a CLHEP routine is calling `exit()` after `geant4` (or `Pythia`?) somehow generates a non-timelike particle! The CLHEP team is fixing their package to replace `exit()` calls with C++ exceptions. The `geant4` problem has occurred at least three times. but is not yet reproducible on demand.

Began deeper study of COBRA software, in particular, understanding COBRA's use of design patterns.

2 Status of Deliverables

COBRA/POOL 7_4_0 has been delivered.

3 Plans For Next Month

- 1) Study `Pythia`/`Geant4`/OSCAR. Attend `Geant4` tutorial here at FNAL.
- 2) Participate as reviewer in LCG software internal review at CERN.

- 3) New COBRA/POOL project to be assigned to me by Vincenzo and Dirk in meeting at CERN during LCG review.
- 4) Continue study of design pattern use in COBRA, to get deeper understanding of the framework (not just use of persistency).